

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

014-12049-D3

SERIAL NO.

10/674,248

APPLICANT

Paulo S. Tubel et al.

FILING DATE

September 29, 2003

GROUP / CONFIRMATION NO.

N/A 13193 3672

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
7	AA	3,722,605	03/27/73	Isham	175	40	02/03/71
	AB	3,857,449	12/31/74	Kimura	175	26	07/05/73
	AC	4,434,654	03/06/84	Hulsing, II et al.	73	151	08/09/82
	AD	4,485,563	12/04/84	Sharp et al.	33	314	12/03/82
	AE	4,488,598	12/18/84	Duerksen	166	252	03/18/83
7	AF	4,656,743	04/14/87	Thiemann et al.	33	1 H	03/08/85
7	AG	4,676,313	06/30/87	Rinaldi	166	252	10/30/85

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBL. DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO	
7	AH	81/01168	30.04.81	WIPO			X	
7	AI	0824810768	27-09-96	EPO			X	
7	AJ	96/09461	28.03.96	WIPO			X	

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages of Publication, Etc.)

7	AK	Alan D. Kersey, Optical Fiber Technology 2.291-317(1996); Article No. 0036, XP-002053711; A Review of Recent Developments in Fiber Optic Sensor Technology, February 13, 1996, pages 291-317. •						
7	AL	Giovanni Botto, Bruno Maggioni and Adeimo Schenato, Society of Petroleum Engineers, XP-002082000, SPE 28484; Electronic, Fiber-Optic Technology: Future Options for Permanent Reservoir Monitoring; 1994, pages 215-224. •						
7	AM	Stephen Heath, A.M. Pritchard, On-Line Chemical Sensing Technology for Downhole and Topside Monitoring of Produced Brines; AEA Technology, XP-002082001, 1995, pages 1-19. •						

EXAMINER

Free 152

DATE CONSIDERED

10/20/03

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next comment to applicant


**SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT**
*(Use several sheets if necessary)*

ATTY. DOCKET NO.

014-12049-D3

SERIAL NO.

10/674,248

APPLICANT

Paulo S. Tubel et al.

FILING DATE

September 29, 2003

GROUP / CONFIRMATION NO.

N/A / 3193

3692

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
71	AA	5,597,042	01/28/97	Tubel et al.	166	250.01	02/09/95
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	PUBL. DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO	
71	AH	FR505.276	27.07.20	EPO				N
	AI							
	AJ							

**OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages of Publication, Etc.)**

	AK	
	AL	
	AM	
EXAMINER		
DATE CONSIDERED		

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line though citation if not in conformance and not considered. Include copy of this form with next comment to applicant



## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

014-12049-D3

SERIAL NO.

10/674,248

APPLICANT

Paulo S. Tubel et al.

FILING DATE

September 29, 2003

GROUP

N/A / 3193

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/	BA	4,697,078	09/29/87	Randall	250	256	04/10/85
/	BB	4,849,753	07/18/89	Merry	340	854	10/18/89
/	BC	4,891,982	01/09/90	Norling	73	497	06/10/88
/	BD	4,905,774	03/06/90	Wittrisch	175	26	05/27/87
/	BE	4,994,671	02/19/91	Safinya et al.	250	255	10/04/89
/	BF	5,113,070	05/12/92	Smith	250	277.21	03/29/91
/	BG	5,131,477	07/21/92	Stagg et al.	175	40	01/16/91

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBL. DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO	
/	BH	96/09561	03/28/96	WIPO			X	
	BI							
	BJ							

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages of Publication, Etc.)

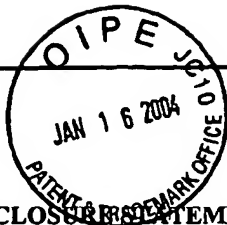
/	BK	Osama S. Karaman, Chevron USA Production Company, Inc., Roy L. Kutlik, Chevron Research and Technology Company, and Ed L. Kluth, Sensor Dynamics Ltd.; Society of Petroleum Engineers, XP-002082002, SPE 35685; A Field Trial to Test Fiber Optic Sensors for Downhole Temperature and Pressure Measurements, West Coalinga Field, California; 1994, pages 351-357. *
/	BL	Gerhard Mutter, Dr. Herwig Malthan, Martin Hafen, & Christopher Noxon, LITEF GmbH; FOG Based Inertial Strapdown System for Online Borehole Measurement, XP-002082274, 1994, pages 681-694. *
/	BM	Sumio Takahashi, Yasunori Murrakami, Toshiaki Kikuchi, Ryohei Yagi and Akio Hasegawa; Simultaneous Sensing of Acoustic Wave and Temperature Using a Polarization-Maintaining Fiber; XP-000085290, 2419 Japanese Journal of Applied Physics, 28(1989)March, Suppl. 28-1, Tokyo, Japan, pages 188-190. *

EXAMINER

DATE CONSIDERED

10/20/04

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next comment to applicant



## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

014-12049-D3

SERIAL NO.

10/674,248

APPLICANT

Paulo S. Tubel et al.

FILING DATE

September 29, 2003

GROUP / CONFIRMATION

N/A 73193

3672

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
7	CA	5,144,590	09/01/92	Chon	367	57	08/08/91
	CB	5,166,747	11/24/92	Schroeder et al.	356	326	06/01/90
	CC	5,351,532	10/04/94	Hager	73	153	10/08/92
	CD	5,361,854	11/08/94	Tull et al.	175	45	10/05/93
	CE	5,363,094	11/08/94	Staron et al.	340	854	12/16/92
7	CF	5,363,095	11/08/94	Normann et al.	340	854	06/18/93
7	CG	5,385,053	01/31/95	Wlodarczyk et al.	73	705	10/06/93

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBL. DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO	
	CH							
	CI							
	CJ							

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages of Publication, Etc.)

7	CK	F. Pigeon, S. Pelissier, A. Mure-Ravaud, H. Gagnaire, S. I. Hosaini and C. Veillas; A vibration sensor, using telecommunication grade monomode fiber, immune to temperature variations; XP-000394438, 2001a Journal de Physique, 3(1993)Septembre, No. 9, Les Ulis, FR, pages 1835-1838. *
7	CL	Initiatives Online Volume 3, SP-002073713; The FlowProbe performs chemical analysis in real-time, February 1996; pages 1-2. *
7	CM	Michel Dietrich; Measurements of attenuation from vertical seismic profiles by iterative modeling, Geophysics, Vol. 50, No. 6 (June 1985), pp. 931-949, 11 Figs., 4 Tables. *

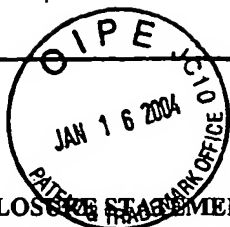
EXAMINER

Frederick

DATE CONSIDERED

11/20/04

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next comment to applicant



## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

014-12049-D3

SERIAL NO.

10/674,248

APPLICANT

Paulo S. Tubel et al.

FILING DATE

September 29, 2003

GROUP / CONFIRMATION

N/A 13193 3672

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
77	DA	5,414,507	05/09/95	Herman et al.	356	345	04/01/93
	DB	5,418,614	05/23/95	Brost et al.	356	434	04/19/93
	DC	5,503,225	04/02/96	Withers	166	250.1	10/08/92
	DD	5,517,024	05/14/96	Mullins et al.	250	254	10/05/93
	DE	5,663,559	09/02/97	Auzerais et al.	250	269.1	06/07/95
77	DF	5,767,411	06/16/98	Maron	73	705	12/31/96
77	DG	5,812,068	09/22/98	Wisler	340	855.5	12/12/95

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBL. DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO
	DH						
	DI						
	DJ						

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages of Publication, Etc.)

77	DK	Lasse Ammundsen et al.; <i>Estimation of phase velocities and Q-factors from zero-offset, vertical seismic profile data</i> , Geophysics, Vol. 59, No. 4 (April 1994), pp. 500-517, 13 Figs. 2 Tables. *					
77	DL	N. C Dutta et al.; <i>Attenuation and dispersion of compressional waves in fluid-filled porous rocks with partial gas saturation (White model)-Part II: Results</i> , Geophysics, Vol. 44, No. 11 (November 1979); pp. 1789-1805, 10 Figs., 4 Tables.					
	DM						

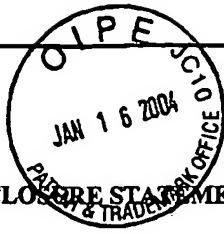
EXAMINER

Frac 15

DATE CONSIDERED

10/20/04

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next comment to applicant



## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

014-12049-D3

SERIAL NO.

10/674,248

APPLICANT

Paulo S. Tubel et al.

FILING DATE

September 29, 2003

GROUP / CONFIRMATION NO.

N/A 13193 3672

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
77	EA	5,892,860	04/06/99	Maron et al.	385	12	01/21/97
	EB	5,898,517	04/27/99	Weis	356	5.09	01/15/98
	EC	6,016,702	01/25/00	Maron	73	705	09/08/97
	ED	6,065,540	05/23/00	Thomeer et al.	166	297	02/08/99
	EE	6,072,567	06/06/00	Sapack	356	32	02/12/97
77	EF	6,206,108	03/27/01	MacDonald et al.	175	245	10/22/97
77	EG	6,209,640	04/03/01	Reimers et al.	166	254.1	03/22/00

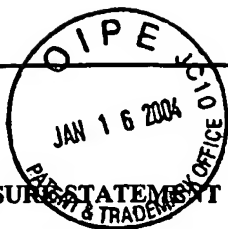
## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBL. DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO	
	EH							
	EI							
	EJ							

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages of Publication, Etc.)

	EK	
	EL	
	EM	
EXAMINER	Frederick	
DATE CONSIDERED	10/20/06	

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next comment to applicant



## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

014-12049-D3

SERIAL NO.

10/674,248

APPLICANT

Paulo S. Tubel et al.

FILING DATE

September 29, 2003

GROUP

N/A 73193

3672

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
77	FA	6,268,911	07/31/01	Tubel et al.	356	72	05/01/98
	FB	5,214,384	05/25/93	Sprunt et al.	324	351	07/24/91
	FC	5,963,508	10/05/99	Withers	367	38	02/14/94
	FD	6,302,204	10/16/01	Reimers et al.	166	250.03	06/27/00
77	FE	6,532,839	03/18/03	Kluth et al.	73	866.5	11/02/99
	FF						
	FG						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBL. DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO	
	FH							
	FI							
	FJ							

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages of Publication, Etc.)

	FK	
	FL	
	FM	
EXAMINER	Frank [Signature]	
DATE CONSIDERED	10/20/04	

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line though citation if not in conformance and not considered. Include copy of this form with next comment to applicant